



Docket: SJO920000194US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTORS: **Chen et al.**

SERIAL NO.: **10/053,785** GROUP ART UNIT: **1775**

FILED: **01/18/02** EXAMINER: **Robert R. Koehler**

FOR: **Method For Electroplating A Body-Centered Cubic Nickel-Iron Alloy Thin Film With A High Saturation Flux Density**

Commissioner for Patents
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

Dear Sir:

In response to the Notice of Allowance dated December 15, 2003, please amend the above identified application as follows.

In the Specification:

Please replace the paragraph beginning at page 8, line 4, with the following rewritten paragraph:

The method of this invention forms electroplated layers 38 and 42 so that the alloy has a small domain size and therefore a relatively low anisotropic field (H_K) with a very high saturation flux density (B_S) of from about 1.9 to about 2.3 T (19 to 23 kG). Seed layers 36 and 40 are preferably formed of an alloy having an equal or higher saturation flux density (B_S) value. For example, seed layers 36 and 40 may be formed of a sputtered nickel-iron alloy with 64% to 81% iron by weight. Or, as other examples, seed layers 36 and 40 may be formed of a sputtered iron-nitride-X (FeNX) alloy, or a cobalt-iron-X (CoFeX) alloy with X